

AMPHIBIA: GYMNOPTERON: TYPHLOECTIDAE

CHTHONERPETON INDISTINCTUM

Catalogue of American Amphibians and Reptiles.

Gudynas, E. and J.D. Williams. 1992. *Chthonerpeton indistinctum*.

Chthonerpeton indistinctum
(Reinhardt and Lütken)

Siphonops indistinctus Reinhardt and Lütken, 1861:202-203. Type-locality, "Buenos Ayres" (Argentina). Lectotype, designated by Taylor (1968), København Universitets Zoologisk Museum, 13 RO-235, an adult (sex unknown) collected by "Mr. Holm", date of collection unknown (not examined by authors).

Chthonerpeton indistinctum: Peters, 1880:940.

Nectocaecilia fasciata: Taylor, 1968:280. See Comment.

- **Content.** No subspecies are recognized.

- **Definition and Diagnosis.** *Chthonerpeton indistinctum* is a typhlonectid with 70-81 (\bar{X} =74.94 in $n=69$ individuals with total lengths > 200 mm) incomplete primary body annuli. Secondary annuli are absent. Total length is 99-530 mm ($n=96$). The skin is smooth; the nostrils are dorsolateral and closer to the snout than to the eyes; the tentacle extrudes midway between the eye and snout (Gudynas et al., 1988). Teeth are in four series: premaxillary-maxillary mode=37; prevomeropalatine $m=24$; dentary $m=28$; splenial $m=6$. The skull is similar to that of other typhlonectids, but with the tentacle opening entirely at the nasopremaxillary border, and an open tentacular groove that crosses the maxillopalatine. The quadrate and pterygoid are completely fused (Azpelicueta et al., 1987). Dorsal coloration is bright black, the venter black-gray, and the entire body is covered with minute white spots (likely the mucous gland apertures). The tentacle and the eye are surrounded by a whitish area which may be continuous or interrupted. The disc area surrounding the vent is cream-white.

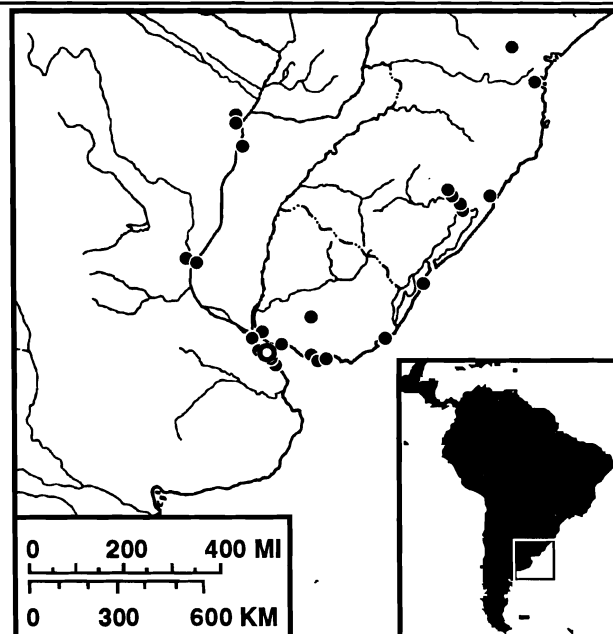
- **Descriptions.** Following the original description, the taxon was briefly described by several authors (e.g., Boulenger, 1882; Nieden, 1913; Dunn, 1942). Taylor (1968) presented a redescription based on 23 individuals, and more recently Gudynas et al. (1988) presented a biosystematic revision based on 96 individuals.

- **Illustrations.** Black and white (B&W) photographs of specimens were provided by Liebermann (1939), Taylor (1968), and Wilkinson (1989). Barrio (1969) included photographs of copulation and birth. Line drawings of the head were given by Gudynas et al. (1988), and of the skull, glossal skeleton, and vertebrae by Wiedersheim (1879), Peters (1880), Ihering (1911) and Azpelicueta et al. (1987) (reproduced by Cei, 1987). Barrio et al. (1971) provided B&W photographs of chromosomes. Welsch and Schubert (1975), Welsch et al. 1976 a, b, 1977, and Welsch and Tan (1979) included photographs of histological, including ultrastructural, detail of several organs.

- **Distribution.** *Chthonerpeton indistinctum* is found in temperate South America, in the Río de la Plata basin and in drainages along the adjacent coasts. In Uruguay the species has been collected in the Río de la Plata and on the Atlantic Ocean coast, with an isolated record from the mainland. In Brasil most of the records are from Rio Grande do Sul state (Atlantic coast, Lagoa dos Patos - Rio Jacui basin), and old records are from Paraná and Santa Catarina states. In Argentina the species occurs in the Buenos Aires province of the Atlantic coast, and at localities adjacent to the Río Paraná in Entre Rios, Santa Fé, Corrientes, and Chaco provinces.

- **Fossil Record.** None.

- **Pertinent Literature.** A survey of relevant literature is found in Gudynas et al. (1988). Azpelicueta et al. (1987) described skull and vertebral morphology, teeth counts, and the glossal skeleton. Barrio (1969) described copulatory behavior and reproductive tract morphology, de Carlo (1980) featured a description of the respiratory tract, and de Carlo and Pellerano (1984) described the esophagus and stomach. Tanner (1971) discussed behavior in captivity. Skuk (1985 a, b) described the tentacular apparatus. Gonadal and reproductive morphology were described by Berois and de Sá (1985) and de Sá and Berois (1985, 1986). The karyotype was described by Barrio et al.



Map. The large open circle marks the type-locality, solid circles indicate other records.

(1971). Several aspects of histology, ultrastructure, and physiology were discussed by Welsch and Schubert (1975), Welsch et al. (1976 a, b, 1977), and Welsch and Tan (1979). Relevant notes on systematics, distribution, and biology were provided by Serié (1915), Gaggero (1934), Liebermann (1939), Achaval et al. (1979), Prigioni (1980 a, b, 1981), and Prigioni and Langone (1983a, b). Recent ecological observations were provided by Gudynas and Williams (1986), biogeography was discussed by Gudynas et al. (1985 a, b, 1988), and systematics by Nussbaum and Wilkinson (1987, 1989) and Wilkinson (1989).

- **Etymology.** The name probably was derived from the Latin *indistinctus*, meaning obscure or dim, in reference to the species' black coloration or in reference to the indistinctiveness of the annuli. Because the species was originally described in the genus *Siphonops*, which generally has bright white annular rings, this etymology is inferred.

- **Comment.** Nussbaum and Wilkinson (1987) suggested that *Chthonerpeton corrugatum* Taylor, 1968; *C. erugatum* Taylor, 1968; and *C. bellmichi* Taylor, 1968 were synonyms of *C. indistinctum*, and listed them as such in Nussbaum and Wilkinson (1989). Prigioni and Langone (1983) and Gudynas et al. (1988) also commented on these synonyms. Taylor (1968) considered the possibility that the original description was based on two specimens representing two different species.

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